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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,748	10/23/2003	Takeshi Kurimoto	D-1529	5783

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EXAMINER

BROWN, DREW J

ART UNIT PAPER NUMBER

3616

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,748

Applicant(s)

KURIMOTO ET AL.

Examiner

Drew J. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/23/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 6 recites that the portioning line extends to the connecting line, implying that the connecting line and the partitioning line are separate lines. According to the figures, reference numerals 2a and 2b form one continuous line. The fact that the claims incorporate the use of two separate lines to form line 2 renders the claims indefinite.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Makoto (JP 2000-085515). Makoto discloses an airbag having an occupant side surface (left end of airbag in Fig. 1) facing the occupant and an opposite side surface (right end of airbag in Fig. 1) opposite to the occupant side surface when the airbag is inflated, where the airbag has an interior partitioned into an upper chamber 12 and a lower chamber 11. A gas generator 20 is disposed in the airbag for generating gas to inflate the airbag, and a gas

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distributor is disposed in the airbag and partly surrounds the gas generator. The gas distributor has a discharge port formed of a connecting line (line separating chambers 11, 12, and 14) extending substantially linearly and connecting the occupant side surface and the opposite side surface of the airbag, and it discharges gas from the gas generator into the upper and lower chambers.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makoto in view of Acker et al. (U.S. Pat. No. 6,349,964 B1).

Makoto discloses the claimed airbag as discussed above, and also discloses that the airbag includes a housing chamber (housing where holes 15 are located) between the connecting line and a rear side rim of the airbag for retaining the gas generator, where the discharge port includes a lower discharge port that communicates with the lower chamber at the lower side of the housing chamber and an upper discharge port that communicates with the upper chamber at the upper side of the housing chamber. In addition, Makoto discloses that the connecting line has a lower part situated close to the rear side rim of the airbag. Makoto, however, does not disclose that the lower discharge port is larger than that of the upper discharge port.

Acker et al. does disclose that the lower discharge ports 44 are larger than the upper discharge ports 42 (column 4, lines 64-67 & column 5, lines 1-2). Therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Makoto with the teachings of Acker et al. to have larger lower discharge ports so the lower chamber has a higher pressure applied to the pelvic region of the occupant than the upper chamber, which has a lower pressure because it is applied to the more-sensitive thoracic region of the occupant.

8. Claims 3, 4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makoto in view of Acker et al., and further in view of Yokoyama (U.S. Pat. No. 6,231,069 B1).

Makoto, as modified by Acker et al., discloses the claimed airbag as discussed above as well as having a rod-shaped gas generator disposed vertically in the housing chamber, but does not disclose that the gas generator has a gas port facing downwardly at one end.

Yokoyama does disclose a wall 17 that directs the gas from the gas generator downwardly. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Makoto as modified by Acker et al. with the teachings of Yokoyama to utilize a wall at the lower end of the housing chamber attached to the gas generator in order to direct the gas downwardly into the lower chamber to fill the center of the lower chamber first. This will create a more even distribution of gas throughout the lower chamber, which improves the overall deployment of the airbag and the safety of the occupant.

Makoto, as modified by Acker et al., also discloses that the housing chamber is disposed between the upper chamber and the rear side rim of the airbag. The airbag is also partitioned with a partitioning line (left wall of duct 13) connecting the occupant side

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surface and the opposite side surface, where the partitioning line extends to the connecting line. The partitioning line also extends from a front side rim of the airbag to an end portion near the rear side rim, and the connecting line extends from the end portion of the partitioning line upwardly to a portion near an upper side rim of the airbag. Finally, the airbag has a second partitioning line (right wall of duct 13) disposed above the partitioning line to form a middle chamber 13 therebetween.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wipasuramonton et al. (U.S. Pat. No. 5,899,490), Zimmerman, II et al. (U.S. Pat. No. 5,586,782), Lachat et al. (U.S. Pat. No. 5,791,685), Acker et al. (U.S. Pat. No. 2005/0134021 A1), Lachat (U.S. Pat. No. 5,853,191), Thomas et al. (U.S. Pat. No. 6,616,177 B2), and Sunnabashiri et al. (U.S. Pat. No. 6,561,539 B1) all disclose similar airbags with upper and lower chambers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 7 a.m. to 4 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J Brown
Examiner
Art Unit 3616

DJB



DAVID R. DUNN
PRIMARY EXAMINER